

Utah State University

DigitalCommons@USU

---

All Graduate Plan B and other Reports

Graduate Studies

---

5-1970

## Significance of Occupational Information in the Junior High School Guidance Program

Asael Wayne Blanchard

Follow this and additional works at: <https://digitalcommons.usu.edu/gradreports>



Part of the [Education Commons](#)

---

### Recommended Citation

Blanchard, Asael Wayne, "Significance of Occupational Information in the Junior High School Guidance Program" (1970). *All Graduate Plan B and other Reports*. 952.

<https://digitalcommons.usu.edu/gradreports/952>

This Report is brought to you for free and open access by the Graduate Studies at DigitalCommons@USU. It has been accepted for inclusion in All Graduate Plan B and other Reports by an authorized administrator of DigitalCommons@USU. For more information, please contact [digitalcommons@usu.edu](mailto:digitalcommons@usu.edu).



SIGNIFICANCE OF OCCUPATIONAL INFORMATION IN THE  
JUNIOR HIGH SCHOOL GUIDANCE PROGRAM

by

Asael Wayne Blanchard

A seminar report submitted in partial fulfillment  
of the requirements for the degree

of

MASTER OF EDUCATION

in

Counseling and Guidance

Approved:

UTAH STATE UNIVERSITY  
Logan, Utah

1970

378.2  
B3925  
Q.2  
Psychology

## TABLE OF CONTENTS

	Page
INTRODUCTION . . . . .	1
Statement of the Problem . . . . .	1
Purpose and Objectives . . . . .	2
Methods of Procedure . . . . .	2
Definition of Terms . . . . .	3
REVIEW OF LITERATURE . . . . .	4
Theory of Vocational Choice . . . . .	4
Occupations . . . . .	12
Occupational Information File . . . . .	21
Employment of Standardized Psychological Tests . . . . .	31
Individual and Group Counseling Interviews . . . . .	44
SUMMARY AND CONCLUSIONS . . . . .	51
Summary . . . . .	51
Conclusions . . . . .	52
A Model Occupational Program . . . . .	53
LITERATURE CITED . . . . .	57
APPENDIXES . . . . .	61
Appendix A. Current Career Films . . . . .	61
Appendix B. Criterion For Selecting Occupational Information . . . . .	62
Appendix C. A Recommended Sample of Occupational Literature Listings . . . . .	63
Appendix D. Sample Testing Programs . . . . .	64
VIA . . . . .	67

## INTRODUCTION

### Statement of the Problem

In the counseling profession during the past few years, emphasis has been placed on appraising the professional identity of the public school counselor. The American School Counselor Association (1963) gives the counselor the broad overview of having the responsibility for assisting all pupils, and with the major concerns for, "the developmental needs and problems of youth". These needs and problems can be many and varied depending on the individual students concerned.

In a recent study by Kennedy and Fredrickson (1969) a 25-item questionnaire was used to determine the needs and desires of the students, and to whom they would go for help regarding these needs in the areas of personal-social-educational, and vocational problems. They had a choice of choosing a teacher, the counselor, another school employee, a family member, a friend, or another individual. When it came to personal-social problems the counselor did not fair too well, but in the areas of educational problems and vocational problems, he was chosen far above the other choices of individuals. These findings are also supported by a study completed by Brough (1965) where counselors were chosen for help by eighth grade girls in the areas of vocational planning and scholastic achievement, but parents were selected for personal-emotional needs.

The implications are that counselors are trying to spend far too much of their time in helping students with personal-social problems and really not meeting the needs of the majority of the students through



educational and vocational help. Taking the vocational or occupational aspect then--the problem is--what should counselors be doing to facilitate students in making future plans and setting appropriate goals? What facilities and materials does he need and what should he be doing to best meet their needs in this area?

### Purpose and Objectives

The purpose of this report is to determine what should be done by counselors to facilitate students in making future plans and appropriate goals, to determine if it is known what should be included in an occupational guidance program for junior high schools, and to set up guidelines for developing such a program.

The objective will be to search through present literature to determine what is known about junior high school vocational guidance programs in terms of content, objectives, procedures, feasibility, and success. This material will then be analyzed and used in setting up guidelines for counselors' and administrators' use in devising a vocational guidance program, and to facilitate carrying out such a program.

### Methods of Procedure

The procedure involved in this study will be a review of existing literature. Both primary and secondary sources will be used to study the problem from the conceptualizations of many different authors. The material will be paraphrased and co-ordinated into a meaningful whole. Special emphasis will be given to the following areas:

1. Theories of vocational choice
2. Occupations
3. Occupational Information File

4. Employment of standardized psychological tests
5. Individual and group counseling interviews

Definition of Terms

1. Junior High School--seventh, eighth, and ninth grade, inclusive.
2. Occupations--a class or unit within a class in which the basic fundamentals of occupational information are taught.
3. S.R.A.--Science Research Associates.
4. D.O.T.--Dictionary of Occupational Titles.
5. N.D.E.A.--National Defense Education Act.

## REVIEW OF LITERATURE

### Theory of Vocational Choice

A person at the time of vocational choice is a product of environmental and hereditary interactions. The variety of cultural and personal forces play on him, including peers, parents, other significant adults, his social class, American culture, and the physical environment he is subjected to. From all of these environmental tasks he is subjected to, a person develops habitual and preferred methods of dealing with things. In making a vocational choice then, the person reaches for alternatives which will satisfy his habitual and preferred adjustive orientations (Holland, 1959).

The present trend in vocational guidance is towards a "holistic" or a "total-personality viewpoint" as Gillman (1954, p. 158) defined it. Theorists no longer concern themselves with isolated traits but view the individual as a total personality within a given social setting. The person becomes a full functioning individual equipped with emotions, motivations, and perceptions in addition to intelligence, interests, and aptitudes, which are complicated by a set of values that help to determine his level of aspirations and his perception of himself in the role of a worker.

Miskimins et al. (1969) believed that there must be a match between the man and his job. This match is divided into two perspectives: working conditions and job requirements, and satisfaction and satisfactoriness. If the job fits, he will be satisfied, and if he fits the job there is satisfactoriness.

### Influential factors

The person-placement congruence form (ppc) devised by the Minnesota Industrial Relations Center is a method for the counselor to estimate the needs of both the individual and the job. The need estimate of the individual's satisfaction was rated on the following criteria: (1) pay, (2) security, (3) supervision, (4) co-workers and, (5) general working conditions. The abilities and job requirements were evaluated under the following headings: (1) intelligence, (2) social skills, (3) ability to be punctual, (4) ability to conform to rules and regulations, (5) ability to work independently, (6) general stability, (7) mental skills, and (8) physical skills.

The counselor then rated each point on a seven point scale to see if the client is capable of meeting each requirement. Using this system, counselors were able to predict the stability of the individuals in certain jobs with a high degree of accuracy (Miskimins et al., 1969).

When one talks about choice of occupations this requires different alternatives from which an individual can select. Entrance requirements are one issue in alternative choices. Which can the individual fulfill? This is further limited by the number of occupations he has been subjected to. Some will seem desirable and others, undesirable. The degree to which the output of the occupation fits the job satisfaction ideals of the individual determines the best choice. The investment varies in occupations--large in medicine, and small for truck driving. In some the investment comes in training and education while others come in tools and equipment.

... three broad classes of determinants of occupational choice: (a) the occupational utility function (preference system); (b) resources for generating various occupational outputs; and (c) outputs or consequences to be had by

employing given resources in various alternatives. (Kaldor and Zytowski, 1969, p. 786)

Every individual is different because his skills and abilities are different. His most preferred occupation depends upon which will give him the most of what he wants (Kaldor and Zytowski, 1969).

One last factor of occupational choice is that the occupation of the father does have a strong bearing on the son's occupational choice, possibly because the father directly and indirectly gives encouragement to his sons along this line in day to day contact; or it could possibly be an inherited factor (Werts, 1968).

### Super's theory

Super (1953), a noted occupational theorist, has given us ten postulates which clarify this modern role or modern trend. He stated that each individual and each occupation has and requires certain abilities, interests, and personalities, but that each has a wide enough tolerance to allow for a variety of occupations for each individual, and a variety of individuals for each occupation. He believed that occupational choice is a long term process and goes through different stages of development.

These stages are the exploratory stage, the establishment stage, the maintenance stage and the decline stage. The junior high school ages that we are concerned about in this paper would fit into the exploratory period. They are aware that they will be involved in an occupation of some type and begin to make tentative choices. From here they explore these choices, many of which are unrealistic and show signs of being a fantasy choice.

Other factors which determine the career pattern are personality

characteristics, socio-economic level, mental ability, and other experiences to which he has been exposed. They help to determine the self-concept or mental picture he has of himself. It is against this mental picture that he evaluates the tentative decisions that he makes.

Super's tenth postulate stated as follows:

Work satisfaction and life satisfaction depend upon the extent to which the individual finds adequate outlets for his abilities, interests, personality traits, and values; they depend upon his establishment in a type of work, a work situation, and a way of life in which he can play the kind of role which his growth and exploratory experiences have led him to consider congenial and appropriate. (Super, 1953, p. 190)

So one might say that if an individual finds pleasure and satisfaction in his work, he does so because the job he holds permits him to use his characteristics and values in a way that is important to him.

If one were to use Super's theory as a theoretical base for setting up a junior high school occupational information program, the entire program would center around helping the individual to understand his own personal abilities, interests, and personality; and that each different occupation requires certain ability, interest and personality characteristics in order for the person to be happy and contented in that particular occupation. Being the long term project that it is would require a well organized program starting in the elementary school and continuing step by step up through the junior high, senior high and college if the program would fulfill the needs of the students.

#### Ginzberg's theory

Ginzberg (1952) also believed that occupational choice is a long process and goes through different stages of development, which he refers to as the "Fantasy, Tentative, and Realistic" periods. The fantasy

period covers from early youth until about age eleven. Here the child assumes that he can do anything he wants. One day he may want to be a policeman, the next day a cowboy, and so on, changing with new interests. The tentative choice area goes from about ages eleven through seventeen. The choices during this period are based on interests and capacities, and occupational choice starts becoming more realistic. The realistic period starts at about seventeen and goes to early adulthood. These age limits are only approximate because everyone has his own unique developmental rate. During the realistic period the individual is able to compromise his capabilities and interests with his environment and opportunities. Counselors need to know what age group they are working with and what type of choices they are making.

Our basic assumption was that an individual never reaches the ultimate decision at a single moment in time, but through a series of decisions over a period of many years; the cumulative impact is the determining factor. (Ginzberg et al., 1951, p. 27)

In order for an individual to choose a proper occupation, he must first have a true self-concept and must know the occupations well enough to see if his abilities, interests and personality coincide with those required by the job. Counselors and teachers have the responsibility of directing the students in both of these areas. They must realize that job seekers are as important as jobs.

The implication in Ginzberg's theory for junior high counseling is centered around building the students' interests in different occupations on a step by step progressive type program by building the students' concepts about themselves and how they would relate in different types of occupations.

Hoppock's theory

Hoppock (1967) proposed a series of ten postulates to explain the body of this theory. All ten of the postulates in one way or another use the word "needs", and center around the idea of meeting individual needs. Individuals choose an occupation to meet their needs; one that will give them a sense of success and accomplishment. This reaction to physical and psychological needs has an influence on the type of occupation one selects. The individual needs are proportional, and the selection will be influenced most by the more important needs. Here needs can be perceived intellectually or they may be a mere vague feeling, but in either case they have an influence on the choice.

As a person becomes aware of his likes and dislikes, he is attracted to certain jobs and repelled by others. As a person becomes more knowledgeable about himself, and different occupations, he is better prepared to find an occupation that will fulfill his needs. The more information a person has about himself the better prepared he is to know what his wants and needs are and what it will require to satisfy them. This is true of information about occupations as well, because the more knowledge he has the more he is able to match, compare and integrate his needs with the qualifications of the occupation. The satisfaction involved depends upon the degree to which job satisfies the needs that one wants it to satisfy. It is not necessary for the job to meet the needs immediately if it promises to meet them in the near future.

Satisfaction that one feels for his job can be upset if he sees another position that is more likely to fulfill his needs.

Using Hoppock's theory as a basis for setting up a junior high school program, the main emphasis would be on broadening the individual in two directions. First, more understanding about himself and his needs,



and second, a wide range of information about many different occupations. Insight would then be needed to coordinate his own personal needs with the fulfillment possibilities of each of the occupations.

### Coordination of theories

All three theories, those of Super, Ginzberg, and Hoppock, while appearing somewhat different on the surface, have basically the same underlying theme. It is that a person must have a good understanding of himself, knowing his limitations, attributes, interests, needs, and basic personality. Next he must be acquainted with as many different occupations as possible, knowing the qualifications that are necessary for success in each of the occupations and the types of individual needs that it can fulfill. Choice then becomes a matching process where the individual can match his characteristics with potentialities of the occupation.

Bordin (1963) in comparing the theories of Super, Roe, Tiederman, Holland, and Ginzberg concluded that all of these theories of occupational life take on either structural vocational choice, development choice or both.

The structural view analyzes occupations within some framework for conceiving personality organization, choosing its terms from that framework. The developmental view attempts to portray the kinds of shaping experiences that can account for personality organization and concomitant vocational patterns. (Bordin, 1963, p. 108)

In a recent research project by Hollander (1967), he experimented with realism and the effect of age differentiation on the realism of vocational choices. His final analysis indicated that realism increased with advancing age and grade. "The results also provide inferential support for Ginzberg's hypothesis that vocational choices change from a basis in fantasy to a basis in reality consideration." (Hollander,

1967, p. 314)

The implication involved in choosing an occupation can be a categorizing element for adolescents as this statement indicated:

Choosing a vocation involves a kind of public self definition that forces one to say to the world, "This is what I am." It is precisely the lack of internal wherewithal to make such a declaration that immobilizes some people when they are faced with having to choose. Although they may wish to avoid declaring themselves, adolescents are always painfully aware of the demand that some decision be made. The incompatibility between the internal inability and external (as well as internal) demand creates a great deal of additional discomfort. (Galinsky and Fast, 1966, p. 89)

Facts of this type are important for counselors to watch for and understand, in order to help the client past such conflicts which he may possess. Occupational choice is such a vital and important decision in the life of an individual that it is especially important not to let peer pressure force a wrong choice.

Behavior variables such as intelligence, interests, and special abilities are undoubtedly due to inheritance or genetic endowment, but little is known about the extent and precise nature of these genetic differences. It is known that these hereditary differences in terms of sensory capacities and central nervous system complexity have an effect on behavior. Upon this relationship of early experience to vocational choice, Roe (1957) offered four hypotheses. In these hypotheses many points of interest are contained. Even though intelligence and aptitudes may have a genetic basis, the evidence is not clear; but still they seem to limit the degree of development and pattern early satisfactions and frustrations. These patterns in terms of attention directiveness focus in definite fields of interest for the person, and the amount of motivation shown in the accomplishment.

Here again several different concepts, approached in several

different ways, but all centering around the main theme that everyone is different. Because they are different they have special needs which can only be satisfied by certain specific occupations, which in turn have need fulfilling potentialities.

### Occupations

Boys and girls as they start to grow up begin to wonder about their place in the world of work. Some decide early in life and stick with it, while others are still exploring working roles after college graduation. The occupations curriculum needs to fit the needs of all students in some kind of a common core while it allows individuals to develop at different individual rates (Baer and Roeber, 1964).

In order to facilitate such a curriculum as mentioned above two important characteristics stand out. The first is that a variety of learning experiences need to be offered in the school setting and outside the school setting, and second, all age groups must have appropriate experiences available (Baer and Roeber, 1964). This would indicate that a well organized program is needed, not just at the high school level, but at all levels including elementary, junior high, senior high and right on through college.

Too many of the occupational programs within the school setting today are poorly organized, staffed, and conducted. According to Mezzano (1969) occupations classes have been introduced and dropped almost immediately after, because teachers are assigned to teach it without proper preparation in teaching it, and with no desire to teach it either. Everyone involved is disappointed.

Teachers must be qualified and interested if the class is going to

be a success. It is just as important to plan and outline a course of study for the occupations class as it is a short talk or a short article. Defining a definite goal with a series of instructional units designed to reach the objectives set forth in the goal is important (Hill and Ewing, 1942).

The teacher being discussed can be either the counselor, a subject matter teacher or any other person who is qualified to teach the subject. The class itself can be listed as part of the curriculum, or as Berdie et al. (1963) stated, units of occupational information can be effectively given in a social studies or English class. In this type of situation broad areas of information such as relatedness of families of occupations, the needs and trends of our own community, utilization of man power within the nation, and above all, the relationship of self understanding and personal characteristics to that of job satisfaction can be discussed. One or two specific occupations could be studied thoroughly to illustrate the use of occupational information.

#### Administration of the occupational program

The principal has a large part to play in the occupational program. We know that he is the central figure in the school and that his administrative efforts will determine to a great extent the effectiveness of the guidance program. Anything that effects the counseling program as a whole will of course effect the occupational information aspect as well. The facilities of the counselor and his access to the area containing the occupational information can be of great help or great detriment to him. The principal's selection of a competent counselor, who is qualified in this area is important to the program. Also, proper distribution of assignments in this field is important if overlap and thin

coverage are to be eliminated. One other area which Christensen (1949) noted is dissemination of occupational information. First of all it is his job to assign someone to be in charge of the occupational library. Whether it be the counselor, the librarian, or another member of the guidance committee makes little difference. The principal will then turn over to this person any occupational information which he might receive, so it can be organized and filed in a usable manner. One other area that is important is the requisition of funds for the occupation library. It takes a lot of money to build and maintain an up to date, adequate library of materials, and it is up to the principal to find adequate funds for a reasonable amount of material.

Scheduling occupational activities into the school program is another area under the principal's jurisdiction. Such activities as career days, vocational talks, and vocational films need to be scheduled into school time (Isaacson, 1966). Time is needed for group tests. The results of the large standardized tests are needed and used in all phases of the guidance program. Also, time for the occupations class itself, whether it be a unit method or in a class by itself, is needed. It is also very possible that the administrator will have to sell the program to his teachers, to the pupils, and the community as well. To conclude this section on the responsibility of the principal, Christensen (1949, p. 154) stated:

If the school is to meet the needs of young people, the principal must administer and supervise the guidance program in such a way that pupils, teachers, and members of the community will recognize it as an integral part of the total educational pattern.

The concept of levels or echelons of guidance responsibilities proposed by Hollis and Hollis (1965) may help identify the individual

and group responsibility in connection with vocational guidance. This approach suggests that the first level consists of guidance activities conducted by the professional teacher within the classroom and includes establishing a feeling of security, promoting the feeling of belonging within the peer groups, encouraging a broader understanding of self, and developing competencies in the subject area. The second echelon may involve teacher or counselor or both, working with the individual toward decisions of long-range concern beyond what can be done within the classroom. Problems of tentative education and vocational choice often fall within this area. Whether teacher or counselor is involved depends primarily upon the qualifications of the teacher, the time needed by the student, and the time the teacher has available. The third echelon is mainly the responsibility of the counselor. Here the individual's needs require work with a professional counselor over an extended period of time. At the fourth echelon the individual's needs require referral to a specialist such as a psychologist or psychiatrist. Here we see that the teacher and counselor work together on the first two levels, the counselor alone on the third and on to the specialist in the fourth. One can see the importance of working together for the betterment of the vocational choice of the individual.

Both the teacher and the counselor are important members of the guidance team in every school. Each makes a unique contribution to the career planning process that supplements the work of the other. Neither can effectively replace the other, nor can either do both aspects of the task that needs to be done if students are to be given the maximum assistance in planning for their futures. The failure of either to perform his function adequately will result in career planning built on a weaker foundation, and therefore more likely to be inadequate. (Isaacson, 1966, p. 13)

They must compliment each other and not overlap in the work that they are doing. Open communication and referral to the counselor when

necessary would be the most ideal situation.

### The goal of the occupations class

"Vocational counseling is a learning experience in decision making." (Samler, 1968, p. 2) In a person's vocational life he faces a number of decision points, not just one. He follows a road which branches a number of times, not a single straight road. This will probably be more true in the future, with all of its technological changes, than it has been in the past (Samler, 1968).

The occupational class in junior high school then is not designed to facilitate an immediate occupational decision. In fact many authorities feel that specific occupational choice is not desirable at this stage because of the immaturity of the individual and the possibility of change in occupational importance as well as occupational opportunities and requirements. Technological advances have increased the importance of occupational versatility, and a worker's versatility is increased by a high level of general education and a wide range of job skills and job information. This means, of course, that each student, no matter what kind of work he will eventually do, needs as much education as he is capable of acquiring and that an important concern of counselors is helping youth to succeed in their school courses. Even so, some degree of vocational choice is important in the high school (McDaniel, 1956).

According to Baer and Roeber (1964) there are three basic objectives of the occupational curriculum: to understand that career development is a process, that there must be a mastery of certain basic concepts concerning education and work, and a formation of comparitability between the self and relationship to career development is needed.

A well organized career planning activity is needed to expose

elementary students, secondary students, and adults to this lifelong process of successful occupational activities. The idea of a single vocational choice has lost meaning since the 1950's, and a career development concept with a succession of planning approximations has become more meaningful and realistic. The whole idea is to stimulate self-exploration into work and educational roles, which would involve a lifelong coordination of activities starting at the elementary level and progressing to adulthood. Basic learning and self-study would then be integrated into an effective occupations curriculum as part of a career developmental process. This is a much more complicated process than the administration and interpretation of a few inventory type tests, based on a superficial choice of a career, in which a student develops a career booklet. No, a variety of experiences need to be developed through the occupations curriculum (Baer and Roeber, 1964).

Tiedeman (1961) referred to this as a roletaking process in which the individual explores the various alternatives. By imagining himself in each of the occupations, and assessing the consequences of each situation, he can associate unique sets of consequences, so that preferred alternatives might come forth for better understanding.

Effective personal planning during the early secondary school years does not require definite vocational decisions; the choice to be made is curriculum choice, and each curriculum provides basic preparation for many occupations. (McDaniel, 1956, p. 215)

#### Construction and subject matter

Traditional courses involve a short time span and are limited to two kinds of activities: (1) a systematic study of several jobs, or an extensive review of one occupation, and (2) an attempt to have each individual complete a self-study of his own interests and personality. The



main thing that is missed is the fact that career development is a lifelong process of planning approximations. To study a few occupations has been the objective of the course, not clarifying the basic concepts involved that are needed by all students. Self-study has been too superficial, depending almost completely on test data, instead of following the form of summerizing developmental trends (Baer and Roeber, 1964).

Since occupational information is a long term project which starts in the elementary grades and continues through junior high, senior high and on up the ladder, it is especially important to have a step by step program which involves all age levels. It is not enough to have occupations taught in the ninth and twelfth grades, leaving all other responsibility to the counselor, who cannot possibly help everyone effectively. A step by step process of teaching occupations with the counselor and teacher working together--complimenting each other--is the only way that a satisfactory program can be effective, and give the students a chance to obtain an adequate self concept, and the knowledge of the world of work which he needs to make the proper choices which will satisfy his needs.

The junior high program is a very important step on the ladder of success, and an adequate program is important. One successful program presented by Leonard (1969) is as follows: seventh grade occupations were taught in the Geography class. Community people were asked on a volunteer basis to come to the school and speak about their own job field. Two film strips, "Who Are You" and "What Do You Like to Do" available through the Science Research Associates, were bought and presented to the students. A committee chairman was chosen from each room to choose and contact speakers from the community, present materials to the class

and formulate questions for the speakers. The speakers were asked to stress the socio-psychological aspects of their jobs.

Eighth grade program was designed to explore community agencies with special emphasis on job families. Occupations was taught as a unit in a history class. Film strips were shown on job families. Room committees were chosen on a voluntary basis and met with the counselor to organize the program. The students voted on job families that interested them, and then the committee arranged for speakers, formulated questions, obtained free materials, researched job family areas, and presented the information to the class before the speaker came. Fieldtrips were scheduled for the committee members to add to their information. Each student was exposed to seven different job family areas, one by each class section, and were divided into seven groups which alternated from speaker to speaker. They held one or two classes per hour.

For the ninth grade the career day was expanded, and divided into four parts, which were held on four different days. The four areas were military, college occupational areas, large company training, and trade school. Featured speakers and small group discussions made up the agenda. Several areas under each heading were available and each student could choose the areas he was interested in.

Use of films and field trips. Several studies have been conducted experimenting with the use of occupation films. Miller (1953) concluded that either vocational films or job visits followed by class discussion were superior methods of studying occupational information, selecting career choices, and in stabilizing the occupational choices. In his experimental study three groups were compared: one using films, one using field trips, and a control group using regular means. The visiting

group gained the most information, the film group was very close behind, and the control group was last in the amount of information that was gained and attained. See Appendix A for information of films.

A project by Laramore (1968) using both audio and visual job presentations was tried. Twenty films of four minute length were made of people in action on the job. Information was gathered about the functions of the worker, the training required, aptitudes desirable, pay scale and the advantages and disadvantages of the occupation itself. Taped background noises were also added to the sound to make it more realistic. These were received enthusiastically by counselors for both group and individual presentation. Twenty more are in the process of being made at the request of N.D.E.A. In a questionnaire students rated the films and 144 rated them excellent, 37 good, and 1 fair. A more controlled experiment is now being conducted. The cost is \$35 a film. Sound can be erased and changed as data change or to fit different age groups. This is felt to be a more effective dissemination than either written or taped material.

Written interpretations do not give a reliable picture of what is actually done on the job. They could learn more from interviewing the job workers themselves. Job interview tapes have even been tried, where the interview was tape recorded, and the tapes used for occupational dissemination. They can also be made into records and placed in juke-box machines for dissemination. Some publishing companies have made this type of recorded interview available.

Teaching occupational trends. It is impossible to predict with much accuracy exactly what the world of work will be in ten or twenty years, but we can get a good idea of what it will be by looking at the

trends, the factors that produce or influence these changes. There are basically two types of trends that influence the world of work. The first is the long-term trends and the second is the short-term trends.

The main factors which influence long term progress are technological progress, invention, and discovery. New discoveries or inventions may create new markets, new industries, and on the other hand eliminate the needs for others. Look at the new avenues that were opened up with the advent of television and space exploration. Another big area is the improvements and refinements which have come about through technological progress. Old methods are giving way to newer and better means. (Moffatt and Rich, 1957, p. 270)

Short-term trends are transitory in nature and therefore of less significance than the long range influences. These include such things as wars; calamities; natural disaster, such as earthquakes, epidemics, fire, and things of this nature; fads, seasonal variation, and other economic pressures such as strikes, material surpluses or shortages and others (Isaacson, 1966). These are only temporary changes, but during this period can produce some extreme changes. Take war for example, the expansion of military services draws men from the entire employment spectrum, often causing shortages of workers in many fields. In addition to this impact, wars ordinarily require rapid expansion in industries closely related to the war efforts. This type of trend cannot be predicted and may not last for very long, but may cause some tremendous changes in the world of work for a limited amount of time.

#### Occupational Information File

In order for youth to make sound occupational choices it is necessary for them to gain maturity through a knowledge of background information in a wide variety of occupations. These materials used will depend upon the purpose and group for which the material is intended. Needs

and age should be taken into consideration as well as educational attainment, and the social and economic backgrounds of the students.

Elementary school information would be built around expansion of knowledge concerning the world of work, with emphasis on the contributions and relationships of different kinds of workers, skills they use, and satisfaction they find through their work. Junior high materials should center around the relationships between abilities and interests and educational choices and occupational requirements, while senior high students being job and college bound should have more comprehensive materials. The goal of this type of occupational information should be to stimulate the aspirations and encourage all races and ethnic groups to develop to the best of their potentials.

A true picture of personal satisfaction gained from the job, the kinds of demands that the job entails, and the changes or effects the job will have on the person's way of life should be included in this type of information (Demos and Grant, 1965).

#### Types of information to be included in the file

The occupational information needed in the school library is basically of two types. The first is a good qualitative reference book such as the Dictionary of Occupational Titles, the Occupations Outlook Handbook and/or Encyclopedia of Career and Vocational Guidance. These can be used as a filing system for other literature, and can be used as a broad general coverage of many occupations. The remainder of the library will contain pamphlets, brochures, articles, booklets and other types of information which will need to be filed systematically according to job titles. This information concerns the nature of the work performed, the qualifications required, the conditions of work, and the returns to the

worker. This information can be of tremendous help to the student in formulating knowledge of the requirements and conditions for success. The counselor will be indirectly if not directly in charge of building and maintaining this library, and of course will use it a great deal in occupational counseling.

This library should not only be a vocational library, but also an educational library containing information from colleges, universities, trade schools, and other vocational schools. Such information as entrance requirements, areas of specialization, housing, fees, scholarships, and so on, can be of tremendous help in guiding the student on to further education (Isaacson, 1966).

In a study by Kuntz and Jetton (1959) in which counselors appraised the occupational literature in their schools, many interesting facts were arrived at. First of all, the materials most generally available were not found to be the most usable materials. Counselors do not use relatively inexpensive or free literature because they are not highly beneficial. This is usually because they are biased in the type of material being presented. They are written most generally to solicit young people into their occupational area. However, occupational pamphlets were rated high in use and usefulness.

The Dictionary of Occupational Titles was rated first as far as use is concerned, but forty-seventh in relation to usefulness. Other materials which they felt were either useful or extremely useful are the Occupational Handbook, Occupational Pamphlets, Life Adjustment Booklets, and professional association materials. Other additional reference sources are life insurance company materials, educational institutions and agencies, and employment office bulletins.

Career novel. Another type of occupational information which is recommended for young people ages eleven to sixteen is called the career novel. This has been referred to as "sugar coated occupational information." They consist of occupational information interwoven in fictional novels. These materials are good, bad, and mediocre, and special emphasis is made on judging each individual book separately (Splaver, 1953).

There are two good publishers for this type of material: the Dodd, Mead, and company, and Julian Messner Inc. In the Dodd series the author must have achieved success in the particular occupation written about in the book. This personally experienced information is interwoven in the story. Girls seem to like this type of occupational information very well, much more so than the boys.

Monographs. There are occupational monographs which study an occupation from almost all aspects that deals with the occupation, and there are special occupational studies which contain only a few aspects of the occupation. Monographs then have the advantage of giving a more complete, well rounded picture of the occupation and saves the counselor or counselee the trouble of piecing together fragments concerning the information from several sources. Special studies are more fragmented and are usually put out by government agencies.

Science Research Association has published the Junior Occupational Briefs, a monograph intended for junior high school students, which combined essential information and narrative materials, which gave youngsters a feeling for the type of work in the occupations described (Baer and Roeber, 1964).

Reviews and other sources. General occupational reviews give a more brief account of a large number of occupations all in a single

volume. They touch on the high points of several occupations. These are especially helpful for use in elementary and junior high schools, where the pupils need to view the world of work from a broad prospective, gaining a little information about a lot of occupations, before studying specific occupations in great detail. The major problem with this type of information is that it becomes outdated very quickly.

Another excellent approach to occupational information is through biographies. Actual illustrations of problems faced by individuals in getting started and advancing in their careers. These can be very interesting, but also many distorted pictures are presented because they are represented by very successful individuals in their chosen occupations.

Other sources of information are films, charts, and other audio-visual materials. They can be excellent if they are properly produced, and present a realistic picture of the occupation (Baer and Roeber, 1964).

#### Selection of materials

It will be of great help to a counselor to know the kinds of occupational literature available, and group them according to his needs. Most materials are of a national basis, because it costs too much to prepare it on a local basis (Baer and Roeber, 1964). The problem of the counselor now is not finding printed material for the file, but selecting the appropriate materials from the many types and sources that are now available. See Appendix F for material selection criteria.

Readability of materials for different age levels consists of studying the style, content, sentence structure, and vocabulary level of each material printed. The number of familiar and unfamiliar words is an important measure of the readability, along with the number of



difficult words compared to the total number of written words. These are only yard-sticks and cannot tell anything about the ideas expressed or the interrelationships among the ideas. This is important in selecting materials that are readable at the specific age level intended.

Reading interest for occupational literature is dependent upon four major factors: (1) how the occupational information is integrated into the counseling process, (2) introduction of occupational information at a proper timing sequence, (3) the participation of the client in the reading plan decision, and (4) through mutual consent the counselor and client acquire the desired information (Diener and Koczkowski, 1960).

In a literature research project using booklet type materials Brayfield and Reed (1950) in critiquing seventy-eight pieces of literature from twenty-four different sources, found two-thirds of the materials ranked in the very difficult reading category, thirty-two percent ranked as difficult. Almost the same proportions were listed as "dull" and "mildly interesting." Only about five percent were found to be readable at the "digest" magazine level.

Not only is readability a problem, but one must beware of recruiting, advertizing, and other special interest materials, that are biased and do not usually give an accurate picture of opportunities, and working conditions (Demos and Grant, 1965).

Highly rated materials. In a survey by Reilley (1969) a questionnaire was answered and filled out by school counselors to determine the usefulness of certain occupational information. The four most popular items in their literature were the Occupational Outlook Handbook, volumes I and II of the Dictionary of Occupational Titles, and Career Opportunities published by the New York Life Insurance Company.

The most useful items were the Occupational Outlook Handbook, the Occupational Exploration Kit, the Career Information Kit, and the Occupational Briefs published by the Science Research Associates. Occupational Outlook Handbook seemed the best all around reference.

Other materials used a great deal by counselors for guidance: The Associates Sound Filmstrips, the American Trade School Directory, the Career Research monographs, and the Armed Forces materials. The Encyclopedia of Careers and Vocational Guidance while available to only a few schools was used a great deal by those who had it.

Educational information according to the questionnaire was used a great deal more than occupational information. National sources were more popular than state, local, and other materials and were presented most often in individual interviews. The next most popular means of dissemination was in class room group sessions, and the next popular was by the use of library materials. The least popular means was through the use of special career days and presentations to the entire grade population.

In preparing to select occupational materials a counselor should keep in mind three things: "(1) availability of materials does not insure usefulness, (2) cost and usefulness of materials are frequently not related, (3) there are some materials that counselors rate as being far more useful than other materials." (Reilly, 1969, p. 441) Other considerations should be cost, local needs, and professional group evaluation, mainly the National Vocational Guidance Association.

#### Filing systems

The best materials in the world today would be useless unless it is well organized in some kind of a usable and understandable system

where the materials can be easily used, systematically found by students, counselors, and others, and replaced by the administrator of the file. It needs to be a system that is adequate for the size of school involved, and expandable as the school enlarges or more materials are acquired. The materials involved would depend upon the vocational, and educational interests of the students and the availability of materials.

The best and most successful place for the occupational file seems to be in the school library, where it is accessible to the students and regular library standards and procedures can be used in handling the materials.

Keeping the file up to date. Pamphlets should be dated on the front and discarded and replaced when five years old. For recruiting pamphlets the following warning should be affixed to the front cover on a gummed label.

This document comes from an author or publisher who would conceivably wish to recruit students or workers. Recruiting literature often says more about the attractions of our occupation than about the disadvantages. Ask your counselor about the disadvantages. (Hoppock and Hoppock, 1960, p. 383)

If no date, copyright or publication date is given, put the purchase date on it in the upper left hand corner. If you decide to keep any materials older than five years, put a warning on it that it may be out of date (Hoppock and Hoppock, 1960).

Many files are not kept up to date, and a lot of recruiting literature is found in them. New materials can be ordered from a recommended list by the Guidance Information Review Service of the National Vocational Guidance Association, listed in the Vocational Guidance Quarterly. An example of the material listings and grading system is found in Appendix C. This is an excellent source giving the type of publication, their

recommendations as to its usefulness, the vocabulary level and the price of the materials. They are listed under occupational headings to make it very convenient for the reader.

Different types of filing systems. The system would depend upon the amount of material to be filed and the users of the file. The Dictionary of Occupational Titles has been used a great deal as a filing system. You may use the coding system of the D.O.T. to code each piece of literature and file it accordingly. This system is especially good for large systems where a tremendous amount of materials are accumulated. However, it is a very complicated system and would not be very desirable for young students, unless they were assisted by older individuals.

The S.R.A. Occupational Filing System uses seventy job field headings and subheadings listed under each main heading. These headings are numbered and lettered for convenience in filing and handling (Yale, 1946).

The latest system and one that may be the best, most useful filing system of the future, but one that at present needs to be researched and studied a great deal to determine its usefulness in the school setting is the Functional Occupational Classification Project (F.O.C.P.). This new system put out by the F.O.C.P. uses the principle of functional analysis. In this system a comparison between the job requirements and the tested and evaluated workers qualifications are used to locate and file materials. The best components for such a comparison are aptitude, interests, temperaments, physical capacities, working conditions, and training time (Walther, 1960).

Dissemination. The dissemination of occupational information can be simplified by making the information available in the school library.

Ruth (1962) questioned this practice even though it is wide spread and encouraged examining the validity of such a practice, because of the type of information presented in these files.

Several large universities and other organizations have developed computer systems for the dissemination of occupational information (Cooley and Hummel, 1969). One computerized system for dissemination of educational and occupational information has been developed by the Systems Development Corporation in 1965 by Cogswell and Extevan. The student works directly with the computer to get the information desired.

Information System for Vocational Decisions (I.S.V.D.) was being developed in 1968 at Harvard by Tiederman and colleagues and was designed to improve decision making, and can be used by the student and counselor together. The student feeds a dialogue of information about his education, training, interest and others that will lead to an appropriate occupational choice. The counselor working together with him assists by evaluating and interpreting the results fed back by the computer.

I.B.M. Guidance Counseling Support System was developed upon the theories of Super. This system fosters "vocational maturity" and was designed to help a student develop his occupational personality and understand his potential, as well as provide information on employment, job training, educational training, and educational and vocational institutions available to him. Information is fed into the system by response to filmstrips and multiple-choice questions, and a typewriter is used for the interaction.

Another system is the Computer-Assisted Career Exploration (C.A.C.E.) developed in Pennsylvania State University by Impellitere in 1968. This system was designed to help ninth grade boys with the study courses in

vocational and technical fields.

These systems will do two things; produce better procedures in formulating and appraising occupational plans for individuals, and provoke critical analysis of present guidance practices. It is a long and costly process of development.

Cooley and Hummel (1969) also did a study on the effects of using computers and came up with the results that when computer planning was compared to counselor help no big difference was noted. They were very close in identifying over and under achievers, and dropouts. The computer predicted higher grade point averages and encouraged the student to explore a more varied range of academic classes. Students generally favored using the computer, but thought it should be used in conjunction with counselors.

#### Employment of Standardized Psychological Tests

Psychological tests can be used to get a mental picture of a person, and can be used as a measurement to assess and describe him and his characteristics, and predict future situations. "Tests are collections of standard stimuli (test items) used to evoke responses." (Berdie, et al., 1963, p. 78) These responses are scored according to a standardized response and classification system, which allows for proper interpretation.

These tests are divided into several categories, which will be discussed separately. They are as follows: achievement, aptitude, interest, and personality. Tests of ability and achievement at the present time are more efficient than tests of interest and personality, because of the complexity and difficulty of making observations of this

type. Tests in general will not do all that many of their enthusiastic adherents expect them to, but if kept in the realm of their limited particular purposes, they can be useful. They are a valuable counseling tool, but the administrator, scores, and interpreter need an extensive background of information to use them intelligently and profitably (Tyler, 1961).

A test is useful for counseling purposes only if there is a considerable amount of evidence as to just what characteristic it is measuring, and if the counselor can state in clear, unambiguous terms what the significance of an individual's score is in relation to various life decisions. (Tyler, 1961, p. 107)

#### Advantages and disadvantages

Some of the advantages are that observations made by the use of tests are easier to communicate than observations by other means. The personal training for test use is less complicated than training for other types of observation. Tests are more efficient, more reliable and less biased than other methods of observation. "These standard observations enable us to assess the achievement of pupils, to describe their psychological traits, and to predict their future behavior." (Berdie et al., 1963, p. 80)

Test information may be a substitute for painful experience by guiding a person away from failure and other painful experiences. However, it is only one aspect of a complicated process by which vocational decisions are made. Students should not substitute tests for their own thinking and reasoning, but as an aid to his thinking. Tests are most helpful in helping him clarify alternatives toward which his thinking should be directed, and in "rubbing out" areas that are not profitable to consider. If this purpose is to be achieved the person himself must

take an active role in choosing the tests, with direction from the counselor (Tyler, 1961).

Disadvantages of tests come mostly from improper use of them. It is not a matter of interpreting a score, but should be oriented toward a better, more complete understanding of the self. They are a means toward this self-understanding but not the complete answer by themselves. Many counselors become test-oriented rather than being pupil-oriented.

Tests are generally more expensive than other means, but when accuracy and usefulness are considered, they are well worth it.

The chief danger in using tests is that tests and test scores easily can become the center of attention, displacing the individual with whom we should be concerned. A test score accrues a reality of its own. Counselors and teachers sometimes use tests not much differently than fortune-tellers use cards or tea-leaf readers use teacups. (Berdie et al., 1963, p. 78)

Intelligence tests are often used to categorize individuals under specific classifications. This can often be very detrimental to a person, isolating him to the point that he is separated from the majority of his peers. Judgements need to be made as to the moral value of the test and whether it will honorably serve the students or subvert their respect for ideas, and their own intellectual competencies and personal integrity (MacDonald and Clements, 1966). Tests should not be over-emphasized because of their limitations.

#### Selection of tests

There are two areas of consideration that one must consider in the testing program. The first is the school's standard testing program, in which a year by year testing procedure is set up in the school to evaluate the progress of each student. See Appendix D for examples of school testing programs. The other area is having a select group of



tests on hand to help students evaluate special areas of interest to them.

The next area of selection should take in the type of test required, the purpose the test will be used for, the length of the test, the age level, the reliability, validity, and the standardization data. The scores of any test can only be useful if there is sufficient background information that scores are able to predict. Does it measure what you want it to (content validity)? Do the results compare favorably with other reliable measuring devices (concurrent validity)? Do the scores predict well future outcomes, as shown in follow-ups (predictive validity)? Is there a theoretical reasoning or basis in accordance with the results (construct validity)? The most important test concept is validity. It is necessary to have a clear concept of what the test measures (Tyler, 1961).

Reliability should be considered in test selection. Does the test measure the same thing every time? Is it consistent? Is it free from chance errors affecting the scores? These questions are important because even with the most reliable tests some variation can be expected in the individual's test performance.

Norms are based on a standardization sample or specified group which provides a standard of reference for the evaluation of the individual. Therefore it is very important to check the standardization population to see if it is characteristic of the individual client concerned. If one is comparing a junior high school student with normative data collected on college freshmen the comparison will not be legitimate and false ideas may be conceived.

Any testing program should be adapted to that particular school or school district. This should be a longitudinal plan and include

kindergarten through grade twelve, be well organized with good follow through procedures employed. Multi-purpose tests should be used wherever possible. Keep in mind the society and immediate community, the physical plant, the teaching and counseling staff, the administrator's philosophy, state and local requirements, and the progression of the students in developing such a program (Berdie et al., 1963).

### Achievement tests

Achievement measures pupil's previously acquired skills and knowledge. This is very important in assessing the present and future goals of students. According to Berdie et al. (1963, p. 46) "The best prediction of future behavior is past behavior." This being true a good progression of achievement scores through the public school grades would be a tremendous asset to a student in choosing his future occupational goals.

Test scores are symbols used for communication purposes, and are important only to the extent that they are used to understand the underlying behavior which the score represents. They are a means of comparing one individual to others the same age. With this in mind, achievement tests are helpful in answering the following questions. Is the client's educational background sufficient for the specialized training program he is considering? What are his strengths and weaknesses (Tyler, 1961)?

For a comprehensive list of achievement tests see the Mental Measurements Yearbook by Buros (1938, 40, 53, 59, 61, 65). Before selecting a test, counselors should check one of these volumes for complete details of each test and comments from different authorities which are contained therein. The following list of achievement tests have been chosen because of the reliability, validity, normative data and

age level. All can be used for the junior high school level and are some of the better tests.

Iowa Test of Educational Development (ITED). This was published by S.R.A. in 1952--for grades 9-12, contains a battery of nine tests--measures educational development of each student--testing time, 7 hours and 40 minutes--validity, .50 to .60 with college grades--reliability, .95 composite--norms, 500,000 students from 225 schools in 49 states--a well developed battery.

California Achievement Test (CAT). This was published by the California Testing Bureau in 1957--five levels including junior high level grades 7-9--tests achievement in fundamental skills in Arithmetic, language, and reading--time, 110 to 180 minutes--validity, around .60--reliability range, .83 to .98--norms, standardized on 341 schools in 48 states--grade placement, age norms, and percentiles given.

The Sequential Tests of Educational Progress (STEP). This test was published by the Educational Testing Service in 1957--four levels, 3A and 3B are for grades 7-9--It is designed to give longitudinal study for individual interpretation from grades 4-14--time, one hour and 45 minutes--very little validity or reliability data available--norms based on 1,000 students per grade in a minimum of 50 schools.

Iowa Test of Basic Skills (ITBS). A test published by Houghton Mifflin Corporation in 1955, for grades 3-9--measures crucial skills involved in reading, work study, language, and arithmetic--test time, 4 hours, 39 minutes--validity, good predictive validity--reliability, range .84 to .98--norms, standardized on 74,174 pupils in 213 schools in 46 states.

Metropolitan Achievement Test (MAT). This was published by Harcourt,

Brace and World, Inc. in 1959--for grades 3-9--a general achievement series--time, 1-4 hours depending on level--validity, little has been done--reliability, .85 or higher--norms, 500,000 pupils from 229 schools in 49 states.

Stanford Achievement Test (SAT). This test was published by Harcourt, Brace and World, Inc. in 1953--for grades 1-9--measurement of growth to bring out strengths and weaknesses of students--time, 80 minutes to 3 hours and 35 minutes depending on the level--validity, based on context validity--reliability, intermediate battery .76 to .93--norms standardized on 460,000 students in 363 schools in 38 states.

#### Aptitude tests

Aptitude tests are designed to help the counselor direct the counselee in making proper judgement as to their abilities to succeed in school academically or how well he will succeed in academic tasks typically found in most schools. There are many good psychological tests that help to make inferences about scholastic progress. All of these tests tend to place emphasis on the pupil's ability to understand and use words meaningfully. In other words, they place a lot of emphasis on verbal learning. Many aptitude tests also contain mathematical items, which test the student's ability to think quantitatively, work with numbers and reason out mathematical concepts (Berdie et al., 1963).

Scholastic aptitude tests are an excellent source for helping to set goals for the amount of education one should strive for. To be effective, these tests should be used throughout the academic process of the student in order to give a clear progress report, and help plan future academic goals and course work. It is possible for motivation and growth patterns to affect change in academic success (Berdie et al., 1963).

Here is a selected list of tests for junior high use, for further information and lists of other tests available see Buros's Mental Measurement Yearbooks.

Lorge-Thorndike Intelligence Tests. A test published by Houghton Mifflin Company in 1954--for grades K-12--measures abstract intelligence or ability to work with ideas and relationships among ideas--testing time 61 minutes--validity, concurrent from .60 to .67--reliability, range .86 to .94--norms, based on 136,000 children in 44 communities and 22 states.

American Council on Education Psychological Examination (ACE). This test was published in 1953--for grades 9-12--general scholastic aptitude test--time, 55 to 60 minutes--validity, from .58 to .82--reliability, from .95 to .97.

California Test of Mental Maturity (CTMM). This includes full and short forms published in 1957 by California Testing Bureau--six levels including junior high, grade 7-9--five scores: memory, spatial, relationships, logical reasoning, numerical reasoning and verbal concepts--general intelligence test--testing time from 48 to 92 minutes depending on the level--validity with other tests, .75 to .86--reliability, .90 to .96--norms, on a large sample.

Cooperative School and College Test (SCAT). This was published by Educational Testing Service in 1957--for grades 4-14, levels III and IV for junior high school--scholastic aptitude test--testing time 70 minutes--validity, range from .40 to .60--reliability, cluster around .95--norms, biased because of poor sample.

Henmon-Nelson Test of Mental Ability. This was published by Houghton Mifflin Company in 1961--four levels, one being 6-9--scores

given in percentile, mental age and I.Q.--time, 30 minutes--validity, .70 to .90--reliability, .90--norms, randomly selected with good representation.

Kuhlman-Anderson Intelligence Test. This test was published by the Personnel Press, Inc. in 1960--booklet G is for junior high--measures mental development and intelligence for grades K-12--time, 45 minutes--reliability, .88 to .95--norms, derived from 15,000 students divided by chronological age.

Kuhlman-Finch Intelligence Test. A test published by the American Guidance Service, Inc. in 1957--for grades 1-12--general intelligence--time, 45 minutes--reliability, .86 to .92--validity, increases with age--scores given in mental age, I.Q. and percentile.

Otis Quick-Scoring Mental Abilities Test. Another fine test published by Harcourt, Brace and World, Inc. in 1954--for grades 1 through college, Beta is for grades 4-9--scholastic aptitude test--testing time, 30 minutes--validity, means from .50 to .61--reliability, .88 to .91.

Stanford-Binet Intelligence Test. This test was published by HoughtonMifflin Company 1960--for ages 2-18--individual intelligence test--time, 30 to 40 minutes--validity, .40 to .75--reliability, .83 to .98--norms, based on a wide national sample.

Wechsler Intelligence Scale for Children (WISC). This test was published by the Psychological Corporation--age range 5-15--individual intelligence test--time, from 40 to 60 minutes--validity, .60 to .90--reliability, .92 to .94--norms, good representative sample in all age groups.

#### Multiple abilities tests

Differential Aptitude Test (DAT). One of the last tests published

by the Psychological Corporation in 1959--for grades 8-12--eight sub-tests: verbal reasoning, numerical reasoning, abstract reasoning, space relations, mechanical reasoning, clerical speed and accuracy, spelling, and sentence--for educational and vocational counseling--testing time, 4 to 5 hours--validity, good predictive validity--reliability, in the .80's and low .90's--norms, good sample in all age levels.

Flanagan Aptitude Classification Test (FACT). This was published by S.R.A. in 1957--for grades 9-12--consists of nineteen aptitude tests designed to help predict success in particular tasks required by a number of occupations--time, 7 hours--validity, good predictive validity--reliability, .52 to .91--norms, 11,000 students from 17 schools in 11 states.

Holtinger-Crowder Unifactor Test. A test published by Harcourt, Brace, and World, Inc. in 1955--grades 7-12--measures four types of mental activities--important in predicting academic success--time, 45 minutes--reliability, .76 to .96--validity, high concurrent validity--norms, insufficient information is given.

Multiple Aptitude Tests. It was published by the California Testing Bureau in 1955--for grades 7-13--nine sub-tests designed to help a person understand his aptitudes--time, 2 hours and 55 minutes--reliability, .91 to .95--validity, extensive data in the manual--norms, based on 11,004 students in 64 schools in 8 regions.

### Personality tests

The concept of personality helps to understand behavior. Counselors do not agree on the names and labels used to describe these concepts. Some of the words applied are:

Emotionality, sociability, emotional maturity, personal

adjustment, stability, interpersonal relationship, feelings of inferiority, self-confidence, emotional control, introvert and extrovert, conforming tendencies, and psychopathic behavior. (Berdie et al., 1963, p. 156)

Personality tests can be very helpful and useful in appraising the client's occupational prospects, and can help answer two major questions (Tyler, 1961). Does he have a personality handicap that he is suffering from? Does the client's pattern of personality characteristics coincide with the occupation or training he is considering?

According to Goldschmid (1967, p. 307), students within a particular major share certain personality characteristics which are significantly different from those in other major fields. The conclusion he drew was, "That particular personality patterns are indeed associated with educational choices."

There are only a limited number of personality tests that can be used for junior high school students, and most of them would be for advanced ninth graders. Here again, check Buros for further information.

California Psychological Inventory (CPI). This was published by Consulting Psychologist Press, Inc. in 1956--for age 13 and older--personality inventory--time, 40 to 60 minutes--validity, .25 to .50--reliability, .38 to .87--norms, sample of over 6,000 members of both sexes.

The Minnesota Counseling Inventory (MCI). A test published by the Psychological Corporation in 1957--for grades 9-12, or anyone with eighth grade or above reading level--adapted for ninth grade use--personality inventory--time, about 50 minutes--validity, significant at the .01 level--reliability, .56 to .93--norms, 5,440 students from 25 schools in two mid-west states.

Mooney Problem Check List (MPCL). This test was published by the Psychological Corporation in 1950--special form for junior high--has a



list of problems from which students check problems they are having--time, 20 to 40 minutes--reliability, .90 to .98--norms, need to develop local norms.

Thematic Apperception Test (TAT). A projective test published by Harvard University Press in 1943--for age 4 to adult--individual projective personality test--no reliability or validity on this type of test--time limit, from 100 to 120 minutes--experienced testers and scorers required.

SRA Youth Inventory. A good test published by S.R.A. in 1960--levels 7-12--personality problems checklist--testing time, 40 minutes--validity, .30 to .95--reliability, .75 to .94--norms, standardized on 2500 high school and 4,000 junior high school students well distributed geographically.

### Interest tests

Interest is determined by what a person would like to do. Just because he has the ability to do a job doesn't mean he is going to like it. Interest can be determined by observation of past free choices, and success in past choices. Interest inventories provide scores which draw inferences between the individual's interests and the interests of men and women already successful in different occupations (Berdie et al., 1963).

In a recent study by Cooley (1967), the following facts of interest were presented. There was a high correlation between ninth grade abilities and twelfth grade interests. Ninth grade interests were highly correlated with twelfth grade interest scales. Ninth grade stated career plans were as good a predictor of twelfth grade career plans as were the ninth grade interest scales. One fourth of the variation in twelfth grade

interests could be explained by ninth grade interest scores.

These results indicate that interest testing in the ninth grade is feasible, and that the results can be weighted quite heavily. Darley and Hagenah (1955) concluded that there is an early development in interest patterns. By the age of fifteen and sixteen, interest patterns are comparatively stable, and remain so thereafter.

Tests of interest are similar to tests of personality in that they are geared to high school and older. However, ninth graders and extremely advanced students of the other junior high level are included in the age range of the tests. Here are a few tests with the lowest age level range. See Buros for further information.

Kuder Preference Record. A useful test published by S.R.A. in 1956--ninth grade to adult--aids in beginning occupational interest and guidance--time, 40 to 45 minutes--validity, based on interest areas compared to occupational groups--reliability, .47 to .75--norms, 3,418 boys and 4,466 girls across the country.

Strong Vocational Interest Blank. This test was published by the Consulting Psychologist Press in 1938--separate tests for men and women--can be used for advanced junior high students--probably the best interest test at the present time--testing time, 40 minutes--validity, .13 to .48--reliability, .69 to .88--norms, based on different occupational groups.

The Strong Test is in question for junior high school students, but according to Darley and Hagenah (1955), it has been used, with a great deal of success, for students down to and including age fourteen. The results were found to be both consistent on retesting as well as meaningful.

## Individual and Group Counseling Interviews

### Individual interviews

Through the counseling interview the counselor has an opportunity to learn much from the client. The client's self understanding can be gained, and his appearances can be studied through direct observation. However, perceptions and judgements are subject to error. Speech handicaps such as stuttering, lisps, limited vocabulary, and unacceptable language usage can also be detected by the counselor. Tests can be used to add accuracy to the observations. During the interview the counselor can piece things together and try to find out what it all means (Berdie et al., 1963).

Only in the interview can the counselor show himself as someone who is really interested in the client, and the client can see that the counselor provides no threat to him, and is a good source of information, and can help him solve his problems. He can see that it is a cooperative process and depends upon cooperation of both he and the counselor. They can select tests and other means of obtaining information to help them in making the right decisions. The counselor can ask questions to direct the person's thoughts, give him problems to explore, provide information, and encouragement as he progresses towards his goal (Berdie et al., 1963).

It has been found that many counselors use the first interview to collect information about the individual and select tests to be taken. Then the second interview is used for test interpretation and incorporation of the test information with other materials gathered. Others feel that the sessions should be more client centered, helping the client become more aware of himself and helping him incorporate this new information in his own life style. In this case when information is found

to be missing, tests may be suggested to help fill in the gaps and interpretations can be given when necessary to throw further light on the subject rather than the one big blast of interpretations (Berdie et al., 1963).

Individual interviewing processes bring out types of data that are needed to help the individual understand his problems, describe test categories, discriminate against areas where there is sufficient information or where tests would not help, recommend specific tests in areas where the counselee is deficient, allow for reaction from the client about doubts and negative feelings, and work through them, and to arrange for the administration of the tests (Brammer and Shostrom, 1960).

Counselor limitations. Counselors very often run into a student whose interest level may exceed his ability level. Very often there is no counseling solution to such a problem, and it is necessary for the individual to face a series of failures, before he reaches a choice at his own level, and which is in accordance with his capacities (Darley and Hagenah, 1955).

The counselor's function is not necessarily to prevent the pupil from taking a particular road, but rather to help the pupil become aware of more promising alternatives in case the road selected does lead to failure. One of the most important jobs of the counselor is to help the pupil realize that being unable to meet certain requirements does not necessarily mean the pupil is a failure; rather, it may mean that the pupil has tried one alternative to learn if it is the correct one, and having discovered that it is not, he has succeeded in learning that some other alternative should be chosen. (Berdie et al., 1963, p. 139)

The age of pupil readiness for occupational choice varies greatly. Some students will be ready early in life while others will not be until after high school. Making such an important decision extends over a long period of time, and the counselor can only help the student to

evaluate the present information that he has obtained, and assist in finding new materials to supplant his present knowledge.

Test interpretations. In the process of interpreting test scores it is assumed that more than one personal interview is necessary in helping the counselee seek out relevant information and undergo experiences. His strong and weak points need to be contrasted in connection with various occupations, in order to become more acquainted with his own personality needs, value systems, and motivations. It is in this understanding between the relationship of abilities and measured interest patterns that the counselor can be most valuable to the counselee.

Through congruency between ability, interest patterns, and individual choice, the counselor can predict an approximate occupational hierarchy. If the correlation is high, a closer approximation is possible between the type of work in which intrinsic satisfaction is offered, and the choice of the individual (Darley and Hagenah, 1955).

When questions of "What shall I do?" involves education or career decisions, one of the most reliable sources for information about the client and his needs comes from analysis of performance on standardized tests. However, "it is important that decisions about testing be made only after there has been a preliminary interview, which creates an atmosphere in which the client's real questions and problems can emerge." (Tyler, 1961, p. 127)

Jensen (1965, p. 239) gives us five crucial aspects in communicating test results to individuals. The first point of interest is, "building a good working relationship," which involves understanding the test itself, allowing time for reaction to the test information, and free communication between counselor and counselee. The second point is

concerned with orientation or acquainting the student with the test or tests he has taken. Both individual and group interviews can be used for this purpose. The third point is explaining the individual's test scores by using the meaningful interpretation such as quartiles, percentiles, stanines, etc. The fourth point involves the use of therapeutic procedures in which the counseling session can be used to explore the counselee's feelings, attitudes and over all reaction to the tests. The warm and understanding atmosphere of the counseling session is used to break down the cold mechanical approach of the test interpretations. The fifth step is the integration of all information. Test data are integrated with other data collected during the counseling process.

When tests are used in vocational guidance the individual receives a better objective analysis than when guidance is used with interview alone. However, tests should be chosen by the client rather than the counselor if this purpose is to be achieved, and the test interpretations should be expressed in simple, nonpsychiatric terms. Also, the information must be brought into the interview in such a way that the student can incorporate it into his picture of himself, instead of building defenses against it.

For the extremely low individuals, the results should be explained to them. Whether they know it or not they still have to adjust to it. A counselor should aim to form a sound understanding about assets and liabilities (raw materials) that they have to work with, even though it is difficult to communicate this type of information in a kindly, non-disparaging manner. It helps to think over test results and terminology before attempting to report them, and then allow time and opportunity for the client to express his attitudes about the information that has been communicated (Tyler, 1961).

### Group counseling interviews

Group counseling has not been accepted as a substitute for individual counseling, but in many cases tends to encourage individuals to seek individual counseling, and prepares them for this type of interview. In other words, group counseling should be used to supplement individual counseling for two reasons; to provide the unique group counseling type of experience, and to accomplish routine type guidance tasks which are more economically feasible in groups. This in turn gives the counselor more time to spend with the people who really need individual help (Wright, 1963).

Trends lately are toward more group activities. Some of the reasons are more competent counselors, better understanding of group processes and procedures, research and experimentation, and larger school enrollments.

The professionally prepared counselor can effectively utilize the group to develop insight into the individual himself as well as into the world of work. In many situations the group process offers an ideal opportunity for helping the student either initiate or progress in his thinking of career related topics. (Isaacson, 1966, p. 383)

In a study by Hoyt (1955) he found group counseling to be effective for the following objectives: (1) increased the awareness that the subject did need help in career planning, (2) increased the use of individual counseling services, (3) occupational literature was used more extensively, and (4) increased knowledge about occupations tentatively chosen. Group counseling is one answer for the problem of increased demand for help by students in vocational guidance.

In his study Hoyt (1955) compared a group of high school students who had participated in group counseling with a group of individual counseling students. He found that one group made just as realistic

choices as did the other. He also found that group procedures are very useful in preparing clients for individual counseling.

Group counseling while involving more than one individual at a time, involves each on a co-ordinate basis. It is more of a social type situation, which is effective for adolescents, because adolescent problems are usually social in nature anyway. It emphasizes a permissive relationship in which one individual can evaluate himself and his opportunities. He can choose a course of action and accept responsibility for those choices. Group counseling overlaps with group guidance, with emphasis on imparting facts, and with group psychotherapy with emphasis on treatment (Caplan, 1957).

Group test interpretations. Before interpreting test results to a group, there are a few points that need to be taken into consideration. They are that the test scores are not injurious to any individual, some feed back is a good idea for the students, and that for practical reasons individual interviews are not available to all (Tipton, 1969).

Group instruction on test results can be very beneficial for the students and time saving for the counselor. The language of test results can be explained and descriptions of test performances can be illustrated and explained. Exercises can be carried out to insure a thorough understanding. When a person is attempting to understand himself, his scholastic aptitude, for instance, this basis for decision making will live with him for the rest of his life. Therefore, it is very important that he understand to the highest possible degree what his test score means to him. Group counseling can help by presenting basic general facts to help give this understanding, and will cut down repetition and the amount of time involved in individual counseling (Laughary, 1961).



Combining individual and group interviews

According to Berdie et al. (1963, p. 175), "The interview is the vehicle of counseling." Individual and group interviewing procedures can be used to either work together or to pull apart. The best system, of course, is having them work together each fulfilling its proper function, complimenting the function of the other. Individual counseling seems to have an edge over group counseling, when it comes to warmth, coverage, clarity, value of the relationship, and test interpretation; while dissemination of a lot of general occupational information can be through group consumption. Both produce equally when it comes to improved self-knowledge.

In a recent study by Folds and Gazda (1966), a comparison was made between three different types of test interpretations; written, individual, and group. Very little difference was found in the results obtained from studying the results of the three types. The individual interpretation was significantly more complete, but as far as recall was concerned, there was basically no difference. If you studied how the students felt about the interpretation, the positive relationship of the individual interpretation gave far more satisfaction than either of the other two.

They found, also, that it seems to take more than a test interpretation to change a self concept, but such change does take place during the second interview, whether or not the client knows his test scores. This change in self concept is due to counselor-client interpersonal relationship, and a second interview following test interpretation is necessary in order to produce this change in self concept and concept of others.

## SUMMARY AND CONCLUSIONS

### Summary

Occupational information is a long term project beginning at an early age and continuing on through adulthood. For a person to choose an occupation that will be satisfactory for him, and one that will fill his needs, he must first know what his needs are. To know what his needs are he must understand himself, have a good clear self image, know his assets and liabilities, his limitations and his interests and motivations. However, knowing this does not insure a person a good occupational choice unless he has a broad knowledge of many occupations and an abundant amount of knowledge in those areas that he finds most interesting. From this point it becomes a role playing exercise where the individual subjects himself into the occupation to see if it satisfies his needs, interests, personality, and accentuates his abilities.

The occupational guidance program has two major goals, then; to help the individual understand himself, gain a true self concept, and introduce him to the world of work, occupations and their requirements. This can only be done by a co-ordinated program using every method at one's disposal. This means a good occupations class, a comprehensive file of occupational literature, incorporation of psychological tests, and group and individual interviews for clarification and understanding. It is only through the co-ordinated use of all of these methods of understanding that an individual can gain the background knowledge necessary to make a mature occupational decision.

The occupations class and information file are designed to give understanding about the world of work, different occupations and what is required to perform the function therein, and the satisfaction it has to offer the employee; whereas, psychological testing and individual and group interviews are for insight into the individual, helping him understand himself and the types of characteristics he possesses.

### Conclusions

A lot of material has been accumulated concerning the occupational program in the junior high school. Many authorities have expressed ideas of considerable weight concerning what should be included and how it should be included. Differences of opinion vary, but most of them have to do with procedure in setting up the program, rather than on what should be included. Many guidelines have been drawn into this paper to help in facilitating the building of a significant occupational program.

This is a gigantic area of importance in the lives of present day students. With some 40,000 different occupations to choose from this can be a very frightening experience for a student if he does not have a few guidelines to follow and some supporting evidences to channel him into proper areas in this world of work. One can readily see the importance of the counselor, teacher and administrator, and especially in their working together to initiate a well rounded program. Clearly defined roles with open communication are an absolute necessity in this program.

The program must be student centered; geared to the upbuilding of the self concept in the individual, and helping him see the relationships between his own abilities, interests, and personality in relationship

to different occupations. With the aid of group and individual tests, good counseling and proper teaching, the task becomes easier by focusing and bringing these concepts as near to reality as possible.

### A Model Occupational Program

Before an adequate occupational program can begin, a lot of planning and preparation is required. Many different facets must be taken into consideration, including the preparation of an occupational and educational file with reference books and unbound career information materials, setting up an adequate testing program, planning the occupations class with a well-outlined lesson plan, and arranging for group and individual counseling sessions to facilitate the understanding and growth of the individuals. The body of this report gives a broad and comprehensive outline in preparing such a program, and this section will be used to draw some of these ideas together to organize a model program.

#### Contents of the occupational file

Reference books. The Encyclopedia of Careers and Vocational Guidance is the best source for junior high school use. The Occupations Outlook Handbook may be added for additional reference material. The Dictionary of Occupational Titles is a very complicated reference set for junior high students, but may be desired because of its completeness.

Unbound materials. (1) Junior Occupational Briefs are published by S.R.A. (2) Other well chosen pamphlets, brochures, articles, and booklets should be included. (3) Bibliographies and career novels if carefully chosen can be very useful.

Educational materials. College and University catalogues along with vocational and trade school bulletins should be included.

Filing system. (1) A filing cabinet is needed and should be placed in the school library. (2) For junior high either the S.R.A. Occupational Filing system or a straight alphabetical system would be best.

The testing program

For the best results a K-12 program should be established so that the growth patterns can be studied for maximum self understanding. For the junior high grades the following testing schedule would be adequate.

Seventh grade. The Stanford Achievement Test (SAT) and the Lorge-Thorndike Intelligence Test would be required for all students.

Eighth grade. This grade would be left open for small group and individual testing.

Ninth grade. The Differential Aptitude Test and the Kuder Preference Record (vocational) would be required for all students.

Selective tests. The Stanford Binet or Wechsler Intelligence Scale for children, Mooney Problem Check List or S.R.A. Youth Inventory, and the Otis Quick Scoring Mental Abilities Test should be used as needed.

The occupations class

The occupations class must allow for individual development rates, while fulfilling the needs of each student. This will entail a wide variety of learning experiences, and appropriate experience must be available for all age groups. The class in junior high should not be geared to decision making, but rather to increasing a broad understanding of occupational groups in the world of work. This together with the promotion of self understanding, and the coordination between self understanding and the world of work is the over all goal of the occupations class. Here is a list of areas that should be included in the class:

(1) a systematic study of many jobs and job families using guest speakers involved in different occupations in the community, films, film strips, tape recordings, and field trips to local agencies; (2) an extensive review of at least one occupation; (3) a usable knowledge of the occupational file and reference materials; (4) tests and test interpretations to increase self understanding; and (5) comparison of individual characteristics to job requirements.

### Individual and group counseling

In order for the occupational program to be successful, both individual and group counseling need to be available. For the selection of special tests, and the interpretation of all tests, they are an absolute necessity. Other types of data, as well as individual problems, can be brought out in the open where the counselee can be made aware of them. Self understanding can only be gained through this type of directed insight. A great deal of counseling time will need to be designated for this type of activity if the program is to be successful.

### The sequential process of the occupational unit

This unit is designed to take three weeks, one class period per day. The first five days will be spent in testing, about one month before the actual occupations unit. The unit itself will take two weeks or ten class periods, but could very easily be extended if so desired. Here it is designed for the three week unit.

Testing. This is designed for 5 class periods with the D.A.T. taking 4 class periods and the Kuder taking 1 class period. These tests are to be given well in advance of the unit, so that the scores will be available for the counselor to make profile sheets. The profile sheets

will compare the results of the D.A.T. and Kuder, together with achievement and intelligent test results, and final class grades.

Test interpretation. One class period is to be spent on test interpretation on a group basis. Individual interpretation and counseling is then provided at special request anytime during the unit and after.

Resource material. Two class periods will be spent in acquainting the students with reference materials. One class period will be spent on reference books and occupational briefs, and the other on career exploration with individual guidance.

Introduction to the world of work. Four class periods will be used in systematic study of jobs and job families, and integration of personal characteristics with job requirements. Reference materials, films, tapes, film strips, etc. will be used.

One occupation. An extensive review of at least one occupation will be accomplished during three periods using films, field trips to local agencies, guest speakers, and reference materials.

## LITERATURE CITED

- American School Counselor Association. 1963. Tentative statement of policy for secondary school counselors. *Personnel and Guidance Journal* 42(10):194-198.
- Baer, Max F., and Edward C. Roeber. 1964. *Occupational Information*. Science Research Associates, Inc., Chicago. 494 p.
- Berdie, Ralph F., Wilburn L. Layton, Edward O. Swanson, Theda Hagenah. 1963. *Testing in Guidance and Counseling*. McGraw-Hill Book Company, New York. 288 p.
- Bordin, Edward. 1963. *Psychological Counseling*. Appleton-Century-Crofts, New York. 409 p.
- Brammer, Lawrence M., and Everett L. Shostrom. 1960. *Therapeutic Psychology*. Prentice-Hall, Inc., Englewood Cliffs, New Jersey. 447 p.
- Brayfield, A.H., and G.A. Reed. 1950. How Readable Are Occupational Information Booklets? *Journal of Applied Psychology*. 34:325-328.
- Brough, J.R. 1965. The High School Counselor: His Concerns and Sources of Help. *The School Counselor*. 13:71-77.
- Buros, O.K. 1938, 40, 53, 59, 61, 65. *The Mental Measurements Yearbook*. Gryphon Press, Highland Park, New Jersey.
- Caplan, Stanley W. 1957. Effects of Group Counseling on Junior High School Boys' Concepts of Themselves in School. *Journal of Counseling Psychology*. 4(2):124-128.
- Christensen, Thomas E. 1949. Responsibility of the High School Principal in the Guidance Program. *School Review*. 57(3):149-154.
- Cooley, William W. 1967. Interactions Among Interests, Abilities, and Career Plans. *Journal of Applied Psychology Monograph*. 51(5):1-16.
- Cooley, William W., and Raymond C. Hummel. 1969. Systems Approaches in Guidance. *Review of Educational Research*. 39:251-262.
- Cottingham, Harold F., and William E. Hopke. 1961. *Guidance in the Junior High School*. McKnight and McKnight Company, Bloomington, Illinois. 390 p.
- Cuony, Edward R. 1969. Current Career Films. *Vocational Guidance Quarterly*. 17(3):226-228.



- Darley, John G., and Theda Hagenah. 1955. Vocational Interest Measurement. University of Minnesota Press, Minneapolis. 279 p.
- Demos, George D., and Bruce Grant. 1965. Vocational Guidance Readings. Charles C. Thomas Publisher, Springfield, Illinois. 521 p.
- Diener, Thomas F., and Henry R. Kaczkowski. 1960. Readability of Occupational Information. Vocational Guidance Quarterly. Winter. pp. 87-89.
- Folds, Jonell H., and George M. Gazda. 1966. A Comparison of the Effectiveness and Efficiency of Three Methods of Test Interpretation. Journal of Counseling Psychology. 13(3):318-324.
- Galinsky, M. David, and Irene Fast. 1966. Vocational Choice As a Focus of the Identity Search. Journal of Counseling Psychology. 13(1): 89-92.
- Gillman, William. 1954. The Role of Vocational Guidance in Counseling Youth. School Review. 62:156-161.
- Ginzberg, E. 1952. Toward a Theory of Occupational Choice. Personnel and Guidance Journal. 30:491-494.
- Ginzberg, E., S.W. Ginsburg, S. Axelrad and J.L. Herma. 1951. Occupational Choice. Columbia University Press, New York. 547 p.
- Goldschmid, Marcel L. 1967. Prediction of College Majors by Personality Tests. Journal of Counseling Psychology. 14(4):302-308.
- Hill, Warren E., and Claude H. Ewing. 1942. Materials and Methods For Vocational Training. McGraw-Hill Book Company, Inc., New York. 171 p.
- Holland, John L. 1959. A Theory of Vocational Choice. Journal of Counseling Psychology. 6(1):35-45.
- Hollander, John W. 1967. Development of a Realistic Vocational Choice. Journal of Counseling Psychology. 14(4):314-318.
- Hoppock, Robert. 1967. Occupational Information. McGraw-Hill, Inc., New York. 598 p.
- Hoppock, Robert E., and Margaret E. Hoppock. 1960. Renovating: An Occupational File. Vocational Guidance Quarterly. Winter. pp. 84-86.
- Hollis, J.W., and L.U. Hollis. 1965. Organizing For Effective Guidance. Science Research Association, pp. 31-32.
- Hoyt, Donald P. 1955. An Evaluation of Group and Individual Programs in Vocational Guidance. Journal of Applied Psychology. 39(1):26-30.
- Isaacson, Lee E. 1966. Career Information in Counseling and Teaching. Allyn and Bacon, Inc., Boston, Mass. 430 p.

- Jensen, Vern H. 1965. Tests and Their Use in Counseling. Brigham Young University Press, Provo, Utah. 300 p.
- Kaldor, Donald R., and Donald G. Zytowski. 1969. A Maximizing Model of Occupational Decision-Making. Personnel of Guidance Journal. 47(8):781-786.
- Kennedy, John J., and Ronald H. Fredrickson. 1969. Student Assessment of Counselor Assistance in Selected Problem Areas. Counselor Education and Supervision. 8(3):206-212.
- Kuntz, James E., and Clyde T. Jetton. 1959. Use and Appraisal of Occupational Literature by Secondary School Counselors. Personnel and Guidance Journal. 37:441-443.
- Laramore, Darryl. 1968. Jobs on Film. Vocational Guidance Quarterly. 17(2):87-90.
- Laughary, John W. 1961. Counseling in Secondary Schools. Harper and Brother Publishers, New York. 153 p.
- Leonard, Rachel S. 1969. Vocational Guidance in Junior High: One School's Answer. Vocational Guidance Quarterly. 17(3):221-223.
- MacDonald, James B., and H. Millard Clements. 1966. Moral Concerns in Assessing Pupil Growth. National Elementary Principal. 45(5):29-33.
- McDaniel, Henry B. 1956. Guidance in the Modern School. The Dryden Press, New York. 350 p.
- Mezzano, Joseph. 1969. A Survey of the Teaching of Occupations. Vocational Guidance Quarterly. 17(4):275-277.
- Miller, Ray A. 1953. Teaching Occupations Using Films and Field Trips. Personnel and Guidance Journal. 31:373-375.
- Miskimins, R.W., L.T. Wilson, K.L. Berry, E.R. Oetting, and C.W. Cole. 1969. Person-Placement Congruence: A Framework For Vocational Counselor. Personnel and Guidance Journal. 47(8):789-793.
- Moffatt, M.P., and S.G. Rich. 1957. Implications of Automation For Education. Journal of Educational Sociology. 30(6):268-274.
- Reilley, Robert R. 1969. Availability and Usefulness of Occupational Materials. The Clearing House. 43(3):439-441.
- Roe, Ann. 1957. Early Determinants of Vocational Choice. Journal of Counseling Psychology. 4(3):212-217.
- Ruth, Roger Alan. 1962. Readability of Occupational Materials. Vocational Guidance Quarterly. Autumn. pp.7-10.
- Samler, Joseph. 1968. Vocational Counseling: A Pattern and a Projection. Vocational Guidance Quarterly. 17(1):2-11.

- Splaver, Sarah. 1953. The Career Novel. *Personnel and Guidance Journal*. 31:371-372.
- Super, D.E. 1953. A Theory of Vocational Development. *American Psychologist*. 8(4):185-190.
- Tiedeman, D.V. 1961. Decisions and Vocational Development: A Paradigm and its Implications. *Personnel and Guidance Journal*. 40:15-20.
- Tipton, Robert M. 1969. Relative Effectiveness of Two Methods of Interpreting Ability Test Scores. *Journal of Counseling Psychology*. 16(1):75-80.
- Tyler, Leona E. 1961. *The Work of the Counselor*. Appleton-Century-Crofts, Inc., New York. 327 p.
- Walker, Joseph L. 1965. Four Methods of Interpreting Tests--Scores Compared. *Personnel and Guidance Journal*. 44:402-404.
- Walther, Regis H. 1960. The Functional Occupational Classification Project: A Critical Appraisal. *Personnel and Guidance Journal*. 39(5):698-704.
- Werts, Charles E. 1968. Paternal Influences On Career Choice. *Journal of Counseling Psychology*. 15(1):48-52.
- Wright, E. Wayne. 1963. A Comparison of Individual and Multiple Counseling for Test Interpretation Interviews. *Journal of Counseling Psychology*. 10(2):126-134.
- Yale, John R. 1946. *How to Build an Occupational Information Library*. The Science Research Associates, Inc., Chicago, Illinois. 166 p.

## APPENDIXES

Appendix ACurrent Career Films

Careers in construction: 22 minutes, color, rental, 1968, Farm Film Foundation, 1425 H Street, N.W. Washington, D.C., 20005, and Associated Builders and Contractors, P.O. Box 8643 Friendship International Airport, Maryland 21240. Young workers in electrical work, common labor, welding, adding machine operating and brick laying.

Duke Thomas, Mailman: 15½ minutes, color, \$170.00, 1967, Churchill Films, 622 N. Robertson Blvd. Los Angeles, Calif. 90069, Mail carrier's duties in an urban area--Junior and senior high school level, recommended by National Vocational Guidance Association (N.V.G.A.).

Job Interview: men, 16 minutes, color, rental, 1967, Churchill Films, 622 N. Robertson Blvd. Los Angeles, Calif. 90069, Three filmed job interviews to stimulate thinking about skills and attitudes which employers seek, junior and senior high, highly recommended by N.V.G.A.

Job Interview: women, 16 minutes, color, rental, 1967, Churchill Films, 622 N. Robertson Blvd. Los Angeles, Calif., 90069, Three filmed job interviews to stimulate thinking about skills and attitudes which employers seek, junior and senior high, highly recommended by N.V.G.A.

Seven For Susie: 13½ minutes, \$50.00, rental, 1968, producer--Irving Gitlin Production, National Easter Seal Society. Rehabilitation worker--treatment given by seven professionals in a rehabilitation center as observed by a young girl. Junior and senior high levels, useful rating, N.V.G.A.

Occupational-Auto Mechanic: 12 minutes, color, free loan, 1968, Modern talking Picture Service, Inc., 16 Spear Street, San Francisco, Calif., 94105. Overview on becoming an automobile mechanic. Junior and senior high, highly recommended by N.V.G.A.

Cuony, Edward R. 1969. Current Career Films. Vocational Guidance Quarterly. 17(3):226-228.

Appendix BCriterion For Selecting Occupational InformationGuidelines for content

The quality and specificity of detail in occupational materials will vary with the intended use of the publication. For example, a publication intended for adults considering retaining or additional training should include more specific information about earnings and fringe benefits than one designed to help students explore the job world. The following is intended not as a schedule for analyzing occupations but as a check list to insure that a particular publication contains the necessary information.

Definition of the occupation as given in the Dictionary of Occupational Titles or as determined by the U.S. Employment Service. (The D.O.T. title should be included if definitions are provided by state employment services, professional and trade associations, unions, licensing bodies, or job analysis.)

History and development of the occupation including its social and economic relationships.

Nature of the work such as duties performed, tools or equipment used, relationships to other occupations, possible work settings and fields of specialization.

Requirements such as education and training, aptitudes, temperaments, interests, physical capacities, and working conditions.

Special requirements such as licensure or certification imposed by law or official organizations.

Methods of entering the occupation such as direct application, personal reference, examination, apprenticeship. (Explanation should be made of the assistance which may be offered by unions, employers, professional and other organizations, public or private employment agencies, school and college placement offices.)

Opportunities for experience and exploration through summer and part-time employment, work study programs, programs of the Armed Forces or voluntary agencies such as the Peace Corps, youth organizations and community services.

Description of usual lines for advancement or of possibilities for transfer to related occupations either through seniority, experience, on-the-job or in-service training, additional education, and examinations.

Employment outlook as suggested by trends likely to affect employment the next five, ten, or twenty years. (Factors affecting particular groups such as geographic area, age, sex, race, physical disabilities, and the like should be considered, as well as factors affecting outlook such as supply and demand, retraining programs, replacement needs, automation, and other technological developments.)

Earnings, both beginning and average wage or salary according to setting, locality and other significant factors as well as supplementary income and fringe benefits such as commissions, tips, overtime, bonuses, meals, housing, hospitalization, vacations, insurance and retirement plans. (Related to earnings are costs or deductions for tools, equipment, uniforms, supplies, and the like.)

Conditions of work and their implications for the individual's way

of life, including where significant, daily and weekly time schedules, overtime, seasonality, physical conditions such as travel required, setting--indoor or outdoor, noise, confusion, temperature, health hazards and strength demands.

Social and psychological factors such as work satisfactions, patterns of relationships with supervisors and other workers, and with unions, associations, or other organizations in which membership may be required or desirable.

Sources of additional information such as books, pamphlets, trade and professional journals, motion pictures, slides and other visual aids, pertinent literature provided by government agencies, unions, associations, industry, schools, colleges and universities.

### Criteria for style and format

The intended use of the occupational material will be a critical factor in the consideration of style and format.

Style should be clear, concise, interesting, and adapted to the readers for whom the material is intended.

Publishers are encouraged to be creative and imaginative in presenting factual information in a stimulating fashion. The typography should be inviting, the total format pleasing, and the illustrations should be of a quality to enhance the effectiveness of the material and to make it appropriate for the age level for which it is planned.

Charts, graphs, or statistical tables should be properly titled and interpreted. Sources and dates of basic data should be given.

The occupational book or pamphlet should state specifically, the publisher, date of publication, the sponsoring organization, group or individual and the author. Information about the author's training and experience should be provided. Pages should be numbered in sequence and the price, when applicable, should be included.

In view of the changing nature of occupations, it is important that information be kept up-to-date. Provision should be made for review and revision when the original publication is issued and new editions should state whether or not contents have been revised. Dates of original publications and of the data used should be given on both first and revised editions. When information about wages or other data subject to relatively rapid change is used, date and source should be indicated.

## Appendix C

### A Recommended Sample of Occupational Literature Listings

Each item listed has been classified and coded in accordance with the following system:

#### Type of publication

A-Career fiction  
B-Biography  
C-Single job information

D-Job family information  
E-Jobs in specific business or  
or industry

F-Recruitment literature  
 G-Article or reprint  
 H-Other

Vocabulary Level

- a adult level
- b high school level and above
- c below high school level

Recommendation

- 1 Highly recommended
- 2 Recommended
- 3 Useful

Accounting

Qualifications of the Hospital Accountant, Joseph Tonascia, Careers, 1967, 1 p. subscription, G-3a

The Making of a CPA, American Institute of Certified Public Accountants, 1968, 14 pp. free, C-3b

Advertising

Career Opportunities In Advertising, American Association of Advertising Agencies, 1967, 24 pp. free, D-3b

Agriculture

Farm Manager, Utah Department of Employment Security, 1968, 2 pp. free, C-1b (Designed for use in Utah)

Irrigator, Utah Department of Employment Security, 1968, 2 pp. free, C-1b (Designed for use in Utah)

Agriculture-Poultry Farming

Farmhand Poultry, Utah Department of Employment Security, 1968, 2 pp. free, C-2b (Designed for use in Utah)

Poultrymen, Science Research Associates, 1968, 4 pp. 406, c-1b

Undergraduate Education in Poultry Science, National Academy of Sciences, 1968, 32 pp. free, H-3b

Vocational Guidance Quarterly. 1968. 17(2):229-238.

Appendix D

Sample Testing Programs

St. Louis Park Junior High School testing program

- 1. Seventh grade (all students).
  - a. Iowa Basic Skills Test.
  - b. Otis Mental Ability Test.
- 2. Eighth grade (all students).
  - a. Iowa Silent Reading Test.



- b. Iowa Algebra Aptitude Test.
- 3. Ninth grade (all students).
  - a. Iowa Tests of Educational Development.
  - b. Kuder Preference Record--vocational.
  - c. American Council on Education, Psychological Examination.

Tests used at all grade levels as need arises.

- 1. Individual intelligence tests
  - a. Stanford Binet.
  - b. Wechsler Intelligence Scale for Children.
- 2. Group intelligence test--Lorge-Thorndike.
- 3. Reading test--Gates Reading Survey
- 4. General achievement
  - a. Stanford Achievement Series.
  - b. Justak Wide Range Achievement Test.
- 5. Personality--Mooney Problems Check List (junior high edition).

Longfellow Junior High School  
Wauwatosa, Wisconsin

7B

Required

- 1. Otis Quick-Scoring Mental Ability Test: New Edition Beta Test EM--to be given in September.
- 2. California Achievement Tests in Reading, Language, and Arithmetic Form AA--to be given to all 7B's between Teachers' Convention and Thanksgiving.

Optional

- 1. California Short-Form Test of Mental Maturity, Intermediate, 1950, S Form.
- 2. Stanford Achievement Test in Reading, Language, Arithmetic--Advanced Battery Partial Form JM.

7A

Required

- 1. Otis Quick-Scoring Mental Ability Test: New Edition Beta Test EM--to all new 7A students upon entry to school.
- 2. California Achievement Tests in Reading, Language, and Arithmetic Form AA--to be given to all 7A's between Teachers' Convention and Thanksgiving.

Optional

- 1. California Short-Form Test of Mental Maturity, Intermediate, 1950, S Form.
- 2. Stanford Achievement Test in Reading, Language, Arithmetic--Advanced Battery Partial Form JM.



## 8B

## Required

1. Otis Quick-Scoring Mental Ability Test: New Edition Beta Test EM--to be given to all new 8B students upon entry to school if they do not have a recent intelligence test in their folders.
2. California Achievement Tests in Reading, Language, Arithmetic, Form BB--to be given to all 8B's between Teachers' Convention and Thanksgiving.
3. Kuder Interest Inventory--to be given to all 8B's any time during the semester.
4. Iowa Algebra Aptitude Test--to be given to all 8B's any time during the semester.

## 8A

## Required

1. Otis Quick-Scoring Mental Ability Test: New Edition Beta Test EM--to be given to all new 8A students upon entry to school if they do not have a recent intelligence test in their folders.
2. California Achievement Test in Reading, Language, and Arithmetic, Form BB--to be given to all 8A's between Teachers' Convention and Thanksgiving.

## 9B

## Required

1. Otis Quick-Scoring Mental Ability Test: New Edition Beta Test EM--to all new 9B students upon entry to school if they do not have a recent intelligence test in folders.
2. Henmon-Nelson Test of Mental Ability--to all 9B's when sent out by University of Wisconsin.
3. Stanford Achievement Test Adv. Language Arts Form DM--to be given between Teachers' Convention and Thanksgiving.

## 9A

## Required

1. Otis Quick-Scoring Mental Ability Test: New Edition Beta Test EM--to all new 9A students upon entry to school if they do not have a recent intelligence test in folders.
2. Henmon-Nelson Test of Mental Ability--to all 9A's when sent out by University of Wisconsin.
3. Stanford Achievement Test Adv. Language Arts Form DM--to be given between Teachers' Convention and Thanksgiving.
4. English Minimum Essentials Test Form A--to be sent over by senior high school and administered by 9A junior high school English teachers, scoring is done by senior high school.

Cottingham, Harold F. and William E. Hopke. 1961. Guidance in the Junior High School. McKnight and McKnight Company, Bloomington, Ill. pp. 97-100.

## VITA

A. Wayne Blanchard

Candidate for the Degree of

Master of Education

Seminar Report: Significance of Occupational Information in the Junior High School Guidance Program

Major Field: Counseling and Guidance

Biographical Information:

Personal Data: Born at Logan, Utah, February 21, 1938, son of Thomas Liddel and Christina E. Blanchard; married Vivian Haderlie June 7, 1962; three children--Tamera, Terry Wayne, and Dorothy.

Education: Attended elementary school in Smithfield, Utah; graduated from North Cache High School in 1956; attended Utah State Agricultural College in 1956; became a missionary for the Church of Jesus Christ of Latter-Day-Saints in the country of Sweden, 1959; received a Bachelor of Science degree from Utah State University with a major in Music Education in 1962; completed requirements for the Master of Education degree, specializing in Counseling and Guidance, at Utah State University in 1970.

Professional Experience: 1962 to present, vocal music teacher, Box Elder School District; 1968 to present, part time counselor, Box Elder School District.